

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1 and 19-22 have been amended. Support for these amendments can be found at least in original claim 6, which has been canceled without prejudice or disclaimer. Claims 1, 3-5 and 7-22 are pending.

Allowable subject matter

Applicants appreciate the indication that claims 8-11, 13-15, 17 and 18 contain allowable subject matter.

Rejections under 35 U. S. C. §§ 102 and 103

Claims 1, 3, 4, 7, 12 and 19-22 stand rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 6,263,667 to Sawada et al. ("Sawada"). Claim 5 stands rejected under 35 U. S. C. § 103(a) as being unpatentable over Sawada in view of U.S. Patent No. 6,763,656 to Bidner et al. ("Bidner"). Claim 6 stands rejected under 35 U. S. C. § 103(a) as being unpatentable over Sawada in view of U.S. Patent No. 6,477,832 to Surnilla et al. ("Surnilla"). Claim 16 stands rejected under 35 U. S. C. § 103(a) as being unpatentable over Sawada and Bidner in view of U.S. Patent No. 5,524,433 to Adamezyk, Jr. et al. ("Adamezyk"). These rejections are respectfully traversed for at least the reasons given below.

Independent claim 1, has been amended to include the features of original claim 6, now cancelled, and recites "wherein the abnormality determining section suspends the abnormality determination of the NOx removing catalyst when the difference of the output values of the first exhaust atmosphere detecting section and the second exhaust gas atmosphere detecting section is larger than a third predetermined value when the output value of the second exhaust gas atmosphere detecting section reaches the second predetermined value." The Office Action recognizes that Sawada does not disclose this feature, which has been incorporated from claim 6, but relies on Surnilla for disclosing this feature. First, it is

submitted that the PTO has not provided any evidence in the record that it would have been suggested to a person of ordinary skill in the art or that such person would have been motivated to combine Sawada and Surnilla. Just because two references *can* be combined does not, by itself, provide a proper basis for making such a combination. There must be some concrete, positive suggestion in the prior art to properly support a combination of references. A recent PTO notice reiterated this point following the Supreme Court's *KSR* decision. Applicants furthermore submit that Surnilla likewise does not disclose or suggest the feature of claim 6 that is also missing from Sawada.

With respect to the features of claim 6, now incorporated into claim 1, the Office Action refers to the NOx trap 72, upstream oxygen sensor 76 and NOx sensor 140 of Surnilla, as well as the flow chart in FIG. 13, and steps 1414 and 1410. The Office Action contends that in FIG. 13, Surnilla teaches that it is conventional in the art to suspend the air-fuel ratio control when a difference of the output values of the oxygen sensor and the NOx sensor exceeds a predetermined value (step 1414 with the YES answer) during a time when the output value of the NOx sensor indicates that a NOx purge is on going (step S1410 with Yes answer). Applicants respectfully disagree.

With respect to the procedure in FIG. 13, Surnilla discloses in step 1314 that the absolute value of the difference between the estimated NOx existing trap 72 (EST_SIGNAL2) and measured second output of exhaust sensor 140 (SIGNAL2) is compared to threshold value C4. When the answer to step 1314 is YES, counter C5 is incremented in step 1316. Next, in step 1318, the determination is made as to whether counter C5 is greater than threshold C6. When the answer to step 1318 is YES, the routine indicates degradation of the second output of exhaust sensor 140 in step 1320. Surnilla does not disclose with respect to the procedure of FIG. 13, however, suspension of the air-fuel ratio control when a difference of the output values of the oxygen sensor and the NOx sensor exceeds a predetermined value during a time when the output value of the NOx sensor indicates that a NOx purge is on going.

With respect to the procedure of the flow chart of FIG. 14, Surnilla discloses in step 1414 that the absolute value of the difference between the estimated exhaust air-fuel ratio

(AFTP_EST) in the first output signal of exhaust gas sensor 140 (SIGNAL1) is compared with threshold C7. When the answer to step 1414 is Yes, counter C8 is incremented in step 1416. The description on FIG. 14 of Surnilla, however, does not disclose, teach or suggest anything about the suspension of the air-fuel ratio control. It is well accepted that silence in a reference does not provide the kind of positive, concrete teaching upon which an allegation of obviousness can be properly based.

Thus, even if Sawada and Surnilla were to be combined (even though the record lacks any proper motivation to do so), the combination would not suggest all the features of independent claim 1. For these reasons, no proper basis exists to support the rejection of the subject matter of amended claim 1, and the rejection should be withdrawn.

Independent claims 19-22 have been amended in a fashion corresponding to the amendment to claim 1, and are patentable for analogous reasons.

The dependent claims are patentable for at least the same reasons as their respective independent claims as well as for further patentable features recited therein.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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